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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,219	12/22/2003	Alan L. Westwick	SIL.P0062	7649
30163	7590	05/04/2005	EXAMINER	
JOHNSON & ASSOCIATES			NGUYEN, PATRICIA T	
PO BOX 90698			ART UNIT	
AUSTIN, TX 78709-0698			PAPER NUMBER	
			2817	

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/743,219	Applicant(s) WESTWICK ET AL	
	Examiner Patricia T. Nguyen	Art Unit 2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20-23 is/are allowed.
- 6) ☒ Claim(s) 1-4, 9-13 and 17-19 is/are rejected.
- 7) ☒ Claim(s) 5-8 and 14-16 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/11/05, 3/29/05</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 9, 11-13, 17, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Ishizuka et al., U.S. Patent # 6,259,325 B1.

Figs. 1 and 10 of Ishizuka et al. discloses a circuit for transforming a singled-ended signal to a differential signal for use by an RF power amplifier suitable for transmitting signals in an RF communication system comprising: in Fig. 1, monolithic IC 11 can be read as a silicon semiconductor device; in Fig. 10, circuit 10b can be read as an RF power amplifier; transformer having L1, L2 can be read as a transformer wherein side L1 can be read as a primary side with the terminal connected to transistor receiving input signal can be read as the first terminal, and terminal connected to Vcc can be read as the second terminal of the primary side; side L2 can be read as a secondary side; circuit 10a can be read as a preamplifier stage.

Regarding claim 9, although Ishizuka et al. does not have his method of transforming a singled-ended RF signal to a differential RF signal in an RF power amplifier written out structurally, his method resides inherently in his apparatus.

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, 4, 9, 11-13, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Rofougaran et al., U.S. Patent # 6,809,581 B2.

Fig. 5 of Rofougaran et al. discloses a circuit for transforming a singled-ended signal to a differential signal for use by an RF power amplifier suitable for transmitting signals in an RF communication system comprising: IC LNA 72 can be read as a silicon semiconductor device; on-chip differential amplifier 104 can be read as an RF power amplifier; on chip balun 102 can be read as a transformer wherein side pri can be read as a primary side with the terminal connected to input signal 108 can be read as the first terminal, and terminal connected to ground can be read as the second terminal of the primary side; side sec can be read as a secondary side; circuit 102, capacitors C1, C2, resistors R1, R2 can be read as a preamplifier stage.

Regarding claim 9, although Rofougaran et al. does not have his method of transforming a singled-ended RF signal to a differential RF signal in an RF power amplifier written out structurally, his method resides inherently in his apparatus.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 10, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishizuka et al. or Rofougaran et al.

Although neither Ishizuka et al. nor Rofougaran et al. mention about the silicon semiconductor device is complimentary metal-oxide semiconductor (CMOS) device, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to use complimentary metal-oxide semiconductor (CMOS) device for the silicon semiconductor device since this material of semiconductor device is well known in the art and this is a matter of design choice in order to have optimum performance for the circuit.

Allowable Subject Matter

Claims 20-23 are allowed.

Claims 5-8, 14-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patents # 4,024,346 and # 4,705,967 contain some limitations of the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia T. Nguyen whose telephone number is (703) 308-1927. The examiner can normally be reached on 6:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on 703-309-4940. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PTN
April 29, 2005



PATRICIA NGUYEN
PRIMARY EXAMINER